



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,461	01/03/2001	Kenshin Yamada	Q62569	1556

7590 04/28/2004

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

PEZZLO, JOHN

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,461

Applicant(s)

YAMADA ET AL.

Examiner

John Pezzlo

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-82 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-41 and 59-82 is/are allowed.
- 6) ☒ Claim(s) 1-17 and 42-58 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2, 4</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claims 44, 45, 47, 48, 50, 53, 55, 56, and 57 are objected to because of the following informalities: The above claims refer to "the stream count" which lacks antecedent basis.

Claim 15 is objected to because of the following informalities: Lines 9 and 10, "packets" is listed twice.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

I. Claims 1-17 and 42-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Shirai et al. (US 5,912, 877) hereinafter Shirai.

Art Unit: 2662

1. Regarding claims 1 and 42 – Shirai discloses a plurality of protocol terminating units, refer to Figure 1 and column 7 lines 9 to 44.

Shirai discloses a destination determining processor, which comprises: a path selecting section which determines a transfer destination route for a stream of packets received from any of said protocol terminating units, wherein said path selecting section determines whether or not transfer of said received stream of packets to said transfer destination route is in an inhibition state, and selects another transfer destination route when the transfer of the packet to said transfer destination route is in the inhibition state, refer to Figure 1 and column 7 lines 9 to 44.

2. Regarding claims 2 and 43 – Shirai discloses said path selecting section determines said transfer destination route or said another transfer destination route based on a load distribution ratio previously set for each said transfer destination route, refer to Figure 1 and column 8 lines 25 to 56.

3. Regarding claims 3, 4, 6, 7, 12, 14, 44, 45, 47, 48, 53, 54, and 55 – Shirai discloses said path selecting section manages the stream count being currently allocated and the maximum stream count to be allocated, for each said transfer destination route, and determines whether or not the transfer of said received steam of packets to said transfer destination route is in the inhibition state, based on comparison between the stream count being currently allocated and the maximum stream count to be allocated, refer to Figures 1 and 2 and column 9 lines 50 to 67 and column 10 lines 1 to 60.

Art Unit: 2662

4. Regarding claims 5 and 46 – Shirai discloses said path selecting section determines whether or not the transfer of said received stream of packets to said another transfer destination route is in the inhibition state, when determining said another transfer destination route for said received stream of packets, refer to Figure 1 and column 7 lines 9 to 44.

5. Regarding claims 11 and 52 – Shirai discloses said path selecting section determines said another transfer destination route based on a predetermined order, refer to Figures 10 and 11 and column 17 line 35 to column 18 line 21.

6. Regarding claims 15, 16, 56, and 57 – Shirai discloses said path selecting section calculates an allocation rate of the stream count being currently allocated to a load distribution ratio for each said transfer destination route, and determines said transfer destination route having the smallest allocation rate as said another calculation result, when determining said another transfer destination route for said received stream of packets, refer to Figure 21 and column 9 lines 50 to 67 and column 22 lines 17 to 48.

7. Regarding claims 17 and 58 – Shirai discloses said path selecting section discards a correspondence between said transfer destination route and said received stream of packets when a packet does not arrive for a predetermined time, refer to column 14 lines 50 to 64.

Claim Rejections - 35 USC § 103

Art Unit: 2662

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. Claims 8-10 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirai (Same as above) in view of Goldszmidt et al. (US 6,195,680 B1) hereinafter Goldszmidt.

1. Regarding claims 8, 9, 10, 49, 50, and 51 – Shirai discloses rerouting packet streams if the primary route is congested (inhibited).

Shirai does not expressly disclose selecting another route based on monitoring for faults.

Goldszmidt discloses said path selecting section monitors whether or not a fault has occurred on said transfer destination route, and assigns a stream of packets allocated to said transfer destination route to said another transfer destination route when said fault has occurred on said transfer destination route, refer to the abstract.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine rerouting due to congestion with faults in order to cover all cases required for rerouting which would make the system more robust and intolerant to system malfunctions and congestion. The benefit being that one monitoring and rerouting function could handle both functions saving and optimizing system resources.

Allowable Subject Matter

Claims 18-41 and 59-82 are allowable over the prior art of record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Buyukkoc et al. (US 6,081,506) discloses an integrating switching and facility networks using ATM.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pezzlo whose telephone number is (703) 306-5420. The examiner can normally be reached on Monday to Friday from 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on (703) 305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Application/Control Number: 09/752,461
Art Unit: 2662

Page 7

Washington, D.C.

or faxed to:

(703) 872-9306

For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

Receptionist (Sixth floor)

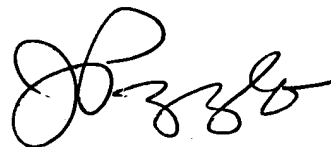
Crystal Park 2

2121 Crystal Drive

Arlington, VA.

John Pezzlo

25 April 2004

A handwritten signature in black ink, appearing to read 'J. Pezzlo', with a stylized, cursive script.

**JOHN PEZZLO
PRIMARY EXAMINER**